



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.            | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------|-------------|----------------------|---------------------|------------------|
| 10/777,069                 | 02/13/2004  | Tsukasa Ooishi       | 67161-138           | 5634             |
| 20277                      | 7590        | 09/08/2005           | EXAMINER            |                  |
| MCDERMOTT WILL & EMERY LLP |             |                      | PHAM, LY D          |                  |
| 600 13TH STREET, N.W.      |             |                      | ART UNIT            |                  |
| WASHINGTON, DC 20005-3096  |             |                      | PAPER NUMBER        |                  |

2827

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                                 |  |
|------------------------------|-------------------------------|---------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/777,069 | Applicant(s)<br>OOISHI, TSUKASA |  |
|                              | Examiner<br>Ly D. Pham        | Art Unit<br>2827                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 February 2004.  
 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 18 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 13 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☒ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/170,580.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/13/04 &amp; 7/5/05</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This application includes the "Request Form for Application under 37 CFR 1.53(b)", which preliminary cancels claims 1 – 17.
2. Applicant's Information Disclosure Statements, IDSs, filed February 13, 2004 have been considered by the Examiner.
3. Claim 18 is presented for the Examination.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 18 is rejected under 35 U.S.C. 102(e) as being anticipated by Hidaka (US Pat 6,587,371 B1).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome

either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding **claim 18**, Hidaka discloses a thin film magnetic memory device (figs. 1, 12, 25, and 26), comprising:

a memory array having a plurality of memory cells arranged in a matrix (fig. 26, exemplary memory cell MC among the others, all arranged in a matrix), each memory cell having an electric resistance that varies according to storage data magnetically written therein (col. 1, lines 9 – 14), said memory array being divided into a plurality of memory blocks along a direction of the memory cell rows (fig. 12 shown with 4 memory blocks, along the direction of both memory cell rows—top left and bottom left blocks, and columns—top right and bottom right blocks);

a plurality of write digit lines arranged respectively corresponding to said plurality of memory cell rows (fig. 26, WWL1, WWL2, ..., WWL6, etc...), for passing therethrough a prescribed write current of a fixed direction in a selected row in data write operation (fig. 25 shows an exemplary data write current  $I_{s1}$  during a data write operation);

a plurality of bit lines (fig. 26, bit lines BL1, BL2, ..., BLm) arranged respectively corresponding to the plurality of memory cell columns, wherein in each memory cell column, said bit line is divided by said plurality of memory blocks (fig. 12, bit lines BL divided by the memory blocks—left blocks from right blocks);

said thin film magnetic memory device further comprising:

a plurality of column selection lines (fig. 12, column selection lines CSL11, CSL12, CSL21, and CSL22) arranged respectively corresponding to said plurality of memory cell columns, for transmitting a column selection result, each column selection line being shared by said plurality of memory blocks (fig. 12, each one of these column selection lines is shared by at least two corresponding top and bottom memory blocks, i.e. lines CSL11 and CSL12 are shared by top left and bottom left memory blocks); and

a plurality of write drivers (fig. 1, read/write control circuits 50 and 60) provided respectively corresponding to said plurality of bit lines, and each operating in response to activation of a corresponding one of said plurality of column selection lines to supply a data write current of a direction corresponding to a level of write data to a corresponding one of said plurality of bit lines (fig. 1 shows write digit lines from 50 and 60 corresponding to column decoder 25, which selects a corresponding one of the plurality of bit lines, as shown in further detail in fig. 12).

### ***Conclusion***


6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

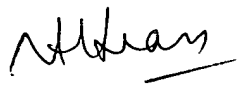
7. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02(b)).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly D. Pham whose telephone number is 571-272-1793. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoai Ho can be reached on 571-272-1777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ly D Pham   
August 25, 2005

  
**HUAN HOANG**  
**PRIMARY EXAMINER**